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SECRETARY FOR  
ENVIRONMENTAL PROTECTION

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**State Water Resources Control Board**

Division of Drinking Water

April 16, 2018

Joseph Halay, Facilities Supervisor  
P.O. Box 85  
Mount Hamilton, CA 95140

**CITATION NO. 02-17-18C-018**

**TOTAL COLIFORM MONITORING AND REPORTING VIOLATION, MARCH 2018**

Dear Mr. Halay:

Enclosed is a Citation issued to the University of California, Santa Cruz, and its public water system known as the Lick Observatory water system.

Any person who is aggrieved by a citation issued by the deputy director of the Division of Drinking Water may file a petition with the State Water Resources Control Board (State Water Board) for reconsideration of the citation. Petitions must be received by the State Water Board within 30 calendar days of the issuance of the citation. The date of issuance is the date when the Division of Drinking Water mails or serves a copy of citation, whichever occurs first. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day. Petitions must be received by 5:00 p.m. Information regarding filing petitions may be found at:

[http://www.waterboards.ca.gov/drinking\\_water/programs/petitions/index.shtml](http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml)

If you have any questions regarding this matter, please contact Philip Dutton at (510) 620-3654 or via email at [Philip.Dutton@waterboards.ca.gov](mailto:Philip.Dutton@waterboards.ca.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Lacy".

Eric Lacy, P.E.  
District Engineer, Santa Clara District  
Division of Drinking Water  
State Water Resources Control Board

Certified Mail No. 7016 2070 0000 9541 6154

cc: Santa Clara County Environmental Health Department

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF DRINKING WATER

**Name of Public Water System:** Lick Observatory

**Water System No:** 4300909

**Attention:** Joseph Halay, Facilities Supervisor  
P.O. Box 85  
Mount Hamilton, CA 95140

**Issued:** April 16, 2018

**CITATION FOR NONCOMPLIANCE**  
**TOTAL COLIFORM MONITORING AND REPORTING VIOLATION**  
**CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64424**  
**MARCH 2018**

The California Health and Safety Code (hereinafter "CHSC"), Section 116650 authorizes the State Water Resources Control Board (hereinafter "State Board") to issue a citation to a public water system when the State Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.

The State Board, acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division, hereby issues this citation



1 pursuant to Section 116650 of the CHSC to the University of California, Santa Cruz  
2 (hereinafter "UCSC") and its public water system known as the Lick Observatory  
3 water system (hereinafter "Water System") for violation of CHSC, Section  
4 116555(a)(1) and California Code of Regulations (hereinafter "CCR"), Title 22,  
5 Section 64424.

6  
7 A copy of the applicable statutes and regulations are included in Appendix 1, which  
8 is attached hereto and incorporated by reference.  
9

### 10 STATEMENT OF FACTS

11 The Water System is classified as a community water system with a reported  
12 residential population of 25 employees, as well as a transient population of 316  
13 visitors, guests, and temporary researchers. The Water System is served by two  
14 surface water springs that supplies all water demands. A surface water treatment  
15 plant with an alternative filtration technology and a free chlorine disinfection process  
16 treats the raw water. Pathogen inactivation is provided via free chlorine residual in a  
17 steel clearwell tank immediately downstream of the treatment plant.  
18

19 The Water System's routine bacteriological sample for the month of March 2018 was  
20 collected on March 12, 2018, from Building 7266 and showed the presence of total  
21 coliform bacteria. The Division received the laboratory report for one repeat sample  
22 that was collected by Lick Observatory upon learning of the total coliform-positive  
23 routine sample. The repeat sample, collected on March 14, 2018, was absent for  
24 total coliform bacteria and *E. Coli*.

25  
26 The Division received no other bacteriological reporting for the month of March 2018.  
27 The Division does note, however, that Lick Observatory attempted to collect



1 additional samples before the end of the calendar month but its laboratory did not  
2 accept them due to the Cesar Chavez holiday.

3  
4 CCR, Title 22, Section 64424(a) states that each water supplier shall collect a repeat  
5 sample set within 24-hours of being notified of a positive result. Section 64424(a)(1)  
6 further states that for a water supplier who collects one routine sample per month, a  
7 repeat sample set shall be at least three samples for each total coliform-positive  
8 sample.

### 9 10 DETERMINATION

11  
12 In accordance with CCR, Title 22, Section 64424, the Water System was required to  
13 collect a repeat sample set, consisting of at least three samples, within 24-hours of  
14 being notified of its positive sample collected on March 12, 2018. The Division  
15 received results for one repeat distribution bacteriological sample collected on March  
16 14, 2018; the repeat sample set was incomplete and does not satisfy the  
17 requirements of Section 64424. The Division received no other bacteriological  
18 reporting for the month of March 2018. Therefore, the Division has determined that  
19 the System violated CCR, Title 22, Section 64424 during the month of March 2018.

### 20 21 DIRECTIVES

22 The System is hereby directed to take the following actions:

- 23  
24 1. The System shall collect the bacteriological sample(s) in accordance with  
25 CCR, Title 22, Section 64423 and 64424 in all future compliance periods.  
26  
27 2. On or before May 15, 2018, notify all persons served by the System of the  
violation of Section 64424 in conformance with CCR, Title 22, Sections



1 64463.4(b)&(c) and 64465. The text of Sections 64463.4 and 64465 are  
2 included in Appendix 1. Appendix 2: Notification Template shall be used to  
3 fulfill this directive, unless otherwise approved by the Division.  
4

- 5 3. Complete Appendix 3: Compliance Certification Form. Submit it together with  
6 a copy of the public notification required by Directive 2 to the Division on or  
7 before May 25, 2018.  
8
- 9 4. Prepare a Corrective Action Plan (CAP) that describes the specific actions  
10 that will be taken to ensure that future monitoring and reporting violations do  
11 not occur. This plan shall include a strategy to ensure that all monitoring is  
12 completed as required and on time and the names of the person(s)  
13 responsible for collecting samples. A back-up person must be identified,  
14 trained, and available to collect the required samples in the event the  
15 designated sampler is unavailable. The CAP should include a staff review of  
16 the current approved Bacteriological Sample Siting Plan. The Water System  
17 shall submit the CAP to the Division by May 25, 2018.  
18

19 All submittals required by this Citation shall be electronically submitted to the Division  
20 at the following address. The subject line for all electronic submittals corresponding  
21 to this citation shall include the following information: Water System name and  
22 number, citation number and title of the document being submitted.  
23

24 Mr. Eric Lacy, P.E.  
25 District Engineer, Santa Clara District  
26 Division of Drinking Water  
27 State Water Resources Control Board  
850 Marina Bay Parkway  
Building P, 2nd Floor  
Richmond, CA 94804-6403

[Dwpdist17@waterboards.ca.gov](mailto:Dwpdist17@waterboards.ca.gov)



1  
2 The State Board reserves the right to make such modifications to this Citation as it  
3 may deem necessary to protect public health and safety. Such modifications may be  
4 issued as amendments to this Citation and shall be effective upon issuance.  
5

6 Nothing in this Citation relieves the Water System of its obligation to meet the  
7 requirements of the California SDWA (CHSC, Division 104, Part 12, Chapter 4,  
8 commencing with Section 116270), or any regulation, standard, permit or order  
9 issued or adopted thereunder.  
10

11 **PARTIES BOUND**

12 This Citation shall apply to and be binding upon the Water System, its owners,  
13 shareholders, officers, directors, agents, employees, contractors, successors, and  
14 assignees.  
15

16 **SEVERABILITY**


17 The directives of this Citation are severable, and the System shall comply with each  
18 and every provision thereof notwithstanding the effectiveness of any provision.  
19

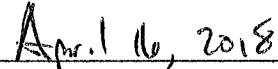
20 **FURTHER ENFORCEMENT ACTION**

21 The California SDWA authorizes the State Board to: issue a citation or order with  
22 assessment of administrative penalties to a public water system for violation or  
23 continued violation of the requirements of the California SDWA or any regulation,  
24 permit, standard, citation, or order issued or adopted thereunder including, but not  
25 limited to, failure to correct a violation identified in a citation or compliance order. The  
26 California SDWA also authorizes the State Board to take action to suspend or revoke  
27 a permit that has been issued to a public water system if the public water system has  
violated applicable law or regulations or has failed to comply with an order of the



1 State Board, and to petition the superior court to take various enforcement measures  
2 against a public water system that has failed to comply with an order of the State  
3 Board. The State Board does not waive any further enforcement action by issuance  
4 of this Citation.  
5  
6  
7

8  
9   
10 Mr. Eric Lacy, P.E.  
11 District Engineer, Santa Clara District  
12 Division of Drinking Water  
State Water Resources Control Board

  
Date

13 Appendices (3):

- 14 1. Applicable Statutes and Regulations  
15 2. Notification Template  
16 3. Compliance Certification Form

17 Certified Mail No. 7016 2070 0000 9541 6154  
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## APPENDIX 1: APPLICABLE STATUTES AND REGULATIONS FOR CITATION NO. 02-17-18C-018

*NOTE: The following language is provided for the convenience of the recipient, and cannot be relied upon as the State of California's representation of the law. The published codes are the only official representation of the law. Regulations related to drinking water are in Titles 22 and 17 of the California Code of Regulations. Statutes related to drinking water are in the Health & Safety Code, the Water Code, and other codes.*

### **California Health and Safety Code (CHSC):**

#### **Section 116271 states in relevant part:**

(a) The State Water Resources Control Board succeeds to and is vested with all of the authority, duties, powers, purposes, functions, responsibilities, and jurisdiction of the State Department of Public Health, its predecessors, and its director for purposes of all of the following:

- (1) The Environmental Laboratory Accreditation Act (Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101).
- (2) Article 3 (commencing with Section 106875) of Chapter 4 of Part 1.
- (3) Article 1 (commencing with Section 115825) of Chapter 5 of Part 10.
- (4) This chapter and the Safe Drinking Water State Revolving Fund Law of 1997 (Chapter 4.5 (commencing with Section 116760)).
- (5) Article 2 (commencing with Section 116800), Article 3 (commencing with Section 116825), and Article 4 (commencing with Section 116875) of Chapter 5.
- (6) Chapter 7 (commencing with Section 116975).
- (7) The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Division 43 (commencing with Section 75001) of the Public Resources Code).
- (8) The Water Recycling Law (Chapter 7 (commencing with Section 13500) of Division 7 of the Water Code).
- (9) Chapter 7.3 (commencing with Section 13560) of Division 7 of the Water Code.
- (10) The California Safe Drinking Water Bond Law of 1976 (Chapter 10.5 (commencing with Section 13850) of Division 7 of the Water Code).
- (11) Wholesale Regional Water System Security and Reliability Act (Division 20.5 (commencing with Section 73500) of the Water Code).
- (12) Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Division 26.5 (commencing with Section 79500) of the Water Code).

(b) The State Water Resources Control Board shall maintain a drinking water program and carry out the duties, responsibilities, and functions described in this section. Statutory reference to "department," "state department," or "director" regarding a function transferred to the State Water Resources Control Board shall refer to the State Water Resources Control Board. This section does not impair the authority of a local health officer to enforce this chapter or a county's election not to enforce this chapter, as provided in Section 116500...

- (k)
- (1) The State Water Resources Control Board shall appoint a deputy director who reports to the executive director to oversee the issuance and enforcement of public water system permits and other duties as appropriate. The deputy director shall have public health expertise.
  - (2) The deputy director is delegated the State Water Resources Control Board's authority to provide notice, approve notice content, approve emergency notification plans, and take other action pursuant to Article 5 (commencing with Section 116450), to issue, renew, reissue, revise, amend, or deny any public water system permits pursuant to Article 7 (commencing with Section 116525), to suspend or revoke any public water system permit pursuant to Article 8 (commencing with Section 116625), and to issue citations, assess penalties, or issue orders pursuant to Article 9 (commencing with Section 116650). Decisions and actions of the deputy director taken pursuant to Article 5 (commencing with Section 116450) or Article 7 (commencing with Section 116525) are deemed decisions and actions taken, but are not subject to reconsideration, by the State Water Resources Control Board. Decisions and actions of the deputy director taken pursuant to Article 8 (commencing with Section 116625) and Article 9 (commencing with Section 116650) are deemed decisions and actions taken by the State Water Resources Control Board, but any aggrieved person may petition the State Water Resources Control Board for reconsideration of the decision or action. This subdivision is not a limitation on the State Water Resources Control Board's authority to delegate any other powers and duties.

#### **Section 116555 states in relevant part:**

(a) Any person who owns a public water system shall ensure that the system does all of the following:

- (1) Complies with primary and secondary drinking water standards.
- (2) Will not be subject to backflow under normal operating conditions.
- (3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.



**Section 116650 states in relevant part:**

- (a) If the state board determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the state board may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The state board may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation and shall be in addition to any liability or penalty imposed under any other law.

**California Code of Regulations, Title 22 (CCR):****Section 64421 (General Requirements) states:**

- (a) Each water supplier shall:
  - (1) Develop a routine sample siting plan as required in section 64422;
  - (2) Collect routine, repeat and replacement samples as required in Sections 64423, 64424, and 64425;
  - (3) Have all samples analyzed by laboratories approved to perform those analyses by the State Board and report results as required in section 64423.1;
  - (4) Notify the State Board when there is an increase in coliform bacteria in bacteriological samples as required in section 64426; and
  - (5) Comply with the Maximum Contaminant Level as required in section 64426.1.
- (b) Water suppliers shall perform additional bacteriological monitoring as follows:
  - (1) After construction or repair of wells;
  - (2) After main installation or repair;
  - (3) After construction, repair, or maintenance of storage facilities; and
  - (4) After any system pressure loss to less than five psi. Samples collected shall represent the water quality in the affected portions of the system.

**Section 64422 (Routine Sample Siting Plan) states:**

- (a) By September 1, 1992, each water supplier shall develop and submit to the State Board a siting plan for the routine collection of samples for total coliform analysis, subject to the following:
  - (1) The sample sites chosen shall be representative of water throughout the distribution system including all pressure zones, and areas supplied by each water source and distribution reservoir.
  - (2) The water supplier may rotate sampling among the sample sites if the total number of sites needed to comply with (a)(1) above exceeds the number of samples required according to Table 64423-A. The rotation plan shall be described in the sample siting plan.
- (b) If personnel other than certified operators will be performing field tests and/or collecting samples, the sample siting plan shall include a declaration that such personnel have been trained, pursuant to §64415 (b).
- (c) The supplier shall submit an updated plan to the State Board at least once every ten years and at any time the plan no longer ensures representative monitoring of the system.

**Section 64423 (Routine Sampling) states:**

- (a) Each water supplier shall collect routine bacteriological water samples as follows:
  - (1) The minimum number of samples for community water systems shall be based on the known population served or the total number of service connections, whichever results in the greater number of samples, as shown in Table 64423-A. A community water system using groundwater which serves 25-1000 persons may request from the State Board a reduction in monitoring frequency. The minimum reduced frequency shall not be less than one sample per quarter.
  - (2) The minimum number of samples for nontransient-noncommunity water systems shall be based on the known population served as shown in Table 64423-A during those months when the system is operating. A nontransient-noncommunity water system using groundwater which serves 25-1000 persons may request from the State Board a reduction in monitoring frequency if it has not violated the requirements in this article during the past twelve months. The minimum reduced frequency shall not be less than one sample per quarter.
  - (3) The minimum number of samples for transient-noncommunity water systems using groundwater and serving 1000 or fewer persons a month shall be one in each calendar quarter during which the system provides water to the public.
  - (4) The minimum number of samples for transient-noncommunity water systems using groundwater and serving more than 1000 persons during any month shall be based on the known population served as shown in Table 64423-A, except that the water supplier may request from the State Board a reduction in monitoring

for any month the system serves 1000 persons or fewer. The minimum reduced frequency shall not be less than one sample in each calendar quarter during which the system provides water to the public.

(5) The minimum number of samples for transient-noncommunity water systems using approved surface water shall be based on the population served as shown in Table 64423-A. A system using groundwater under the direct influence of surface water shall begin monitoring at this frequency by the end of the sixth month after the State Board has designated the source to be approved surface water.

(6) A public water system shall collect samples at regular time intervals throughout the month, except that a system using groundwater which serves 4,900 persons or fewer may collect all required samples on a single day if they are taken from different sites.

(b) In addition to the minimum sampling requirements, all water suppliers using approved surface water which do not practice treatment in compliance with Sections 64650 through 64666, shall collect a minimum of one sample before or at the first service connection each day during which the turbidity level of the water delivered to the system exceeds 1 NTU. The sample shall be collected within 24 hours of the exceedance and shall be analyzed for total coliforms. If the water supplier is unable to collect and/or analyze the sample within the 24-hour time period because of extenuating circumstances beyond its control, the supplier shall notify the State Board within the 24-hour time period and may request an extension. Sample results shall be included in determining compliance with the MCL for total coliforms in Section 64426.1.

(c) If any routine, repeat, or replacement sample is total coliform-positive, then the water supplier shall collect repeat samples in accordance with Section 64424 and comply with the reporting requirements specified in Sections 64426 and 64426.1.

**Table 64423-A**  
Minimum Number of Routine Total Coliform Samples

Monthly Population Served	Service Connections	Minimum Number of Samples
25 to 1000	15 to 400	1 per month
1,001 to 2,500	401 to 890	2 per month
2,501 to 3,300	891 to 1,180	3 per month
3,301 to 4,100	1,181 to 1,460	4 per month
4,101 to 4,900	1,461 to 1,750	5 per month
4,901 to 5,800	1,751 to 2,100	6 per month
5,801 to 6,700	2,101 to 2,400	7 per month
6,701 to 7,600	2,401 to 2,700	2 per week
7,601 to 12,900	2,701 to 4,600	3 per week
12,901 to 17,200	4,601 to 6,100	4 per week
17,201 to 21,500	6,101 to 7,700	5 per week
21,501 to 25,000	7,701 to 8,900	6 per week
25,001 to 33,000	8,901 to 11,800	8 per week
33,001 to 41,000	11,801 to 14,600	10 per week
41,001 to 50,000	14,601 to 17,900	12 per week
50,001 to 59,000	17,901 to 21,100	15 per week
59,001 to 70,000	21,101 to 25,000	18 per week
70,001 to 83,000	25,001 to 29,600	20 per week
83,001 to 96,000	29,601 to 34,300	23 per week
96,001 to 130,000	34,301 to 46,400	25 per week
130,001 to 220,000	46,401 to 78,600	30 per week
220,001 to 320,000	78,601 to 114,300	38 per week
320,001 to 450,000	114,301 to 160,700	50 per week
450,001 to 600,000	160,701 to 214,300	55 per week
600,001 to 780,000	214,301 to 278,600	60 per week
780,001 to 970,000	278,601 to 346,400	70 per week
970,001 to 1,230,000	346,401 to 439,300	75 per week
1,230,001 to 1,520,000	439,301 to 542,900	85 per week
1,520,001 to 1,850,000	542,901 to 660,700	90 per week
1,850,001 to 2,270,000	660,701 to 810,700	98 per week
2,270,001 to 3,020,000	810,701 to 1,078,600	105 per week
3,020,001 to 3,960,000	1,078,601 to 1,414,300	110 per week
3,960,001 or more	1,414,301 or more	120 per week

**Section 64423.1 (Sample Analysis and Reporting of Results) states:**

(a) The water supplier shall designate (label) each sample as routine, repeat, replacement, or "other" pursuant to Section 64421(b), and have each sample analyzed for total coliforms. The supplier also shall require the laboratory to analyze the same sample for fecal coliforms or *Escherichia coli* (*E. coli*) whenever the presence of total coliforms is indicated. As a minimum, the analytical results shall be reported in terms of the presence or absence of total or fecal coliforms, or *E. coli* in the sample, whichever is appropriate.

(b) The water supplier shall require the laboratory to notify the supplier within 24 hours, whenever the presence of total coliforms, fecal coliforms or *E. coli* is demonstrated in a sample or a sample is invalidated due to interference problems, pursuant to Section 64425(b), and shall ensure that a contact person is available to receive these analytical results 24-hours a day. The water supplier shall also require the laboratory to immediately notify the State Board of any positive bacteriological results if the laboratory cannot make direct contact with the designated contact person within 24 hours.

(c) Analytical results of all required samples collected for a system in a calendar month shall be reported to the State Board not later than the tenth day of the following month, as follows:

(1) The water supplier shall submit a monthly summary of the bacteriological monitoring results to the State Board.

(2) For systems serving fewer than 10,000 service connections or 33,000 persons, the water supplier shall require the laboratory to submit copies of all required bacteriological monitoring results directly to the State Board.

(3) For systems serving more than 10,000 service connections, or 33,000 persons, the water supplier shall require the laboratory to submit copies of bacteriological monitoring results for all positive routine samples and all repeat samples directly to the State Board.

(d) Laboratory reports shall be retained by the water supplier for a period of at least five years and shall be made available to the State Board upon request.

**Section 64424 (Repeat Sampling) states in relevant part:**

(a) If a routine sample is total coliform-positive, the water supplier shall collect a repeat sample set as described in paragraph (1) within 24 hours of being notified of the positive result. The repeat samples shall all be collected within the same 24 hour time period. A single service connection system may request that the State Board allow the collection of the repeat sample set over a four-day period.

(1) For a water supplier that normally collects more than one routine sample a month, a repeat sample set shall be at least three samples for each total coliform-positive sample. For a water supplier that normally collects one or fewer samples per month, a repeat sample set shall be at least four samples for each total coliform-positive sample.

(2) If the water supplier is unable to collect the samples within the 24-hour time period specified in subsection (a) or deliver the samples to the laboratory within 24 hours after collection because of circumstances beyond its control, the water supplier shall notify the State Board within 24 hours. The State Board will then determine how much time the supplier will have to collect the repeat samples.

(b) When collecting the repeat sample set, the water supplier shall collect at least one repeat sample from the sampling tap where the original total coliform-positive sample was taken. Other repeat samples shall be collected within five service connections upstream or downstream of the original site. At least one sample shall be from upstream and one from downstream unless there is no upstream and/or downstream service connection.

(c) If one or more samples in the repeat sample set is total coliform-positive, the water supplier shall collect and have analyzed an additional set of repeat samples as specified in subsections (a) and (b). The supplier shall repeat this process until either no coliforms are detected in one complete repeat sample set or the supplier determines that the MCL for total coliforms specified in Section 64426.1 has been exceeded and notifies the State Board.

(d) If a public water system for which fewer than five routine samples/month are collected has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month. If the supplier stops supplying water during the month after the total coliform-positive(s), at least five samples shall be collected during the first month the system resumes operation. A water supplier may request the State Board waive the requirement to collect at least five routine samples the following month, but a waiver will not be granted solely on the basis that all repeat samples are total coliform-negative. To request a waiver, one of the following conditions shall be met:

(1) The State Board conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect public health.

(2) The State Board determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with Section 64426.1.

**Section 64425 (Sample Invalidation) states:**

(a) A water supplier may request the Department to invalidate a sample for which a total coliform-positive result has been reported if the supplier demonstrates:

(1) All repeat sample(s) collected at the same tap as the original total coliform-positive sample also are total coliform-positive and all repeat samples collected within five service connections of the original tap are not total coliform-positive; or

(2) The laboratory did not follow the prescribed analytical methods pursuant to §64415(a), based on a review of laboratory documentation by the Department. The supplier shall submit to the Department a written request for invalidation along with the laboratory documentation, the supplier's sample collection records and any observations noted during sample collection and delivery. The water supplier shall require the laboratory to provide the supplier with documentation which shall include, but not be limited to:

- (A) A letter from the director of the laboratory having generated the data, confirming the invalidation request by reason of laboratory accident or error;
- (B) Complete sample identification, laboratory sample log number (if used), date and time of collection, date and time of receipt by the laboratory, date and time of analysis for the sample(s) in question;
- (C) Complete description of the accident or error alleged to have invalidated the result(s);
- (D) Copies of all analytical, operating, and quality assurance records pertaining to the incident in question; and
- (E) Any observations noted by laboratory personnel when receiving and analyzing the sample(s) in question.

(b) Whenever any total coliform sample result indicative of the absence of total coliforms has been declared invalid by the laboratory due to interference problems as specified at 40 Code Federal Regulations, Section 141.2100(c)(2), the supplier shall collect a replacement sample from the same location as the original sample within 24 hours of being notified of the interference problem, and have it analyzed for the presence of total coliforms. The supplier shall continue to re-sample at the original site within 24 hours and have the samples analyzed until a valid result is obtained.

**Section 64426 (Significant Rise in Bacterial Count) states in relevant part:**

- (a) Any of the following criteria shall indicate a possible significant rise in bacterial count:
  - (1) A system collecting at least 40 samples per month has a total coliform-positive routine sample followed by two total coliform-positive repeat samples in the repeat sample set;
  - (2) A system has a sample which is positive for fecal coliform or *E. coli*; or
  - (3) A system fails the total coliform Maximum Contaminant Level (MCL) as defined in Section 64426.1.
- (b) When the coliform levels specified in subsection (a) are reached or exceeded, the water supplier shall:
  - (1) Contact the State Board by the end of the day on which the system is notified of the test result or the system determines that it has exceeded the MCL, unless the notification or determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board within 24 hours; and
  - (2) Submit to the State Board information on the current status of physical works and operating procedures which may have caused the elevated bacteriological findings, or any information on community illness suspected of being waterborne. This shall include, but not be limited to:
    - (A) Current operating procedures that are or could potentially be related to the increase in bacterial count;
    - (B) Any interruptions in the treatment process;
    - (C) System pressure loss to less than 5 psi;
    - (D) Vandalism and/or unauthorized access to facilities;
    - (E) Physical evidence indicating bacteriological contamination of facilities;
    - (F) Analytical results of any additional samples collected, including source samples;
    - (G) Community illness suspected of being waterborne; and
    - (H) Records of the investigation and any action taken.

**Section 64426.1 (Total Coliform Maximum Contaminant Level (MCL)) states in relevant part:**

- (b) A public water system is in violation of the total coliform MCL when any of the following occurs:
  - (1) For a public water system which collects at least 40 samples per month, more than 5.0 percent of the samples collected during any month are total coliform-positive; or
  - (2) For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive; or
  - (3) Any repeat sample is fecal coliform-positive or *E. coli*-positive; or
  - (4) Any repeat sample following a fecal coliform-positive or *E. coli*-positive routine sample is total coliform-positive.
- (c) If a public water system is not in compliance with paragraphs (b)(1) through (4), during any month in which it supplies water to the public, the water supplier shall notify the State Board by the end of the business day on which this is determined, unless the determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board within 24 hours of the determination. The water supplier shall also notify the consumers served by the water system. A Tier 2 Public Notice shall be given for violations of paragraph (b)(1) or (2), pursuant to section 64463.4. A Tier 1 Public Notice shall be given for violations of paragraph (b)(3) or (4), pursuant to section 64463.1.

**Section 64463.1 (Tier 1 Public Notice) states in relevant part:**

- (a) A water system shall give public notice pursuant to this section and section 64465 if any of the following occurs:
  - (1) Violation of the total coliform MCL when:
    - (A) Fecal coliform or *E. coli* are present in the distribution system; or
    - (B) When any repeat sample tests positive for coliform and the water system fails to test for fecal coliforms or *E. coli* in the repeat sample;...
- (b) As soon as possible within 24 hours after learning of any of the violations in subsection (a) or being notified by the State Board that it has determined there is a potential for adverse effects on human health [pursuant to paragraph (a)(4), (5), or (6)], the water system shall:

- (1) Give public notice pursuant to this section;
  - (2) Initiate consultation with the State Board within the same timeframe; and
  - (3) Comply with any additional public notice requirements that are determined by the consultation to be necessary to protect public health.
- (c) A water system shall deliver the public notice in a manner designed to reach residential, transient, and nontransient users of the water system and shall use, as a minimum, one of the following forms:
- (1) Radio or television;
  - (2) Posting in conspicuous locations throughout the area served by the water system;
  - (3) Hand delivery to persons served by the water system; or
  - (4) Other method approved by the State Board, based on the method's ability to inform water system users.

**Section 64463.4 (Tier 2 Public Notice) states:**

- (a) A water system shall give public notice pursuant to this section if any of the following occurs:
- (1) Any violation of the MCL, MRDL, and treatment technique requirements, except:
    - (A) Where a Tier 1 public notice is required under section 64463.1; or
    - (B) Where the State Board determines that a Tier 1 public notice is required, based on potential health impacts and persistence of the violations;
  - (2) All violations of the monitoring and testing procedure requirements in sections 64421 through 64426.1, article 3 (Primary Standards – Bacteriological Quality), for which the State Board determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations;
  - (3) Other violations of the monitoring and testing procedure requirements in this chapter, and chapters 15.5, 17 and 17.5, for which the State Board determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations; or
  - (4) Failure to comply with the terms and conditions of any variance or exemption in place.
- (b) A water system shall give the notice as soon as possible within 30 days after it learns of a violation or occurrence specified in subsection (a), except that the water system may request an extension of up to 60 days for providing the notice. This extension would be subject to the State Board's written approval based on the violation or occurrence having been resolved and the State Board's determination that public health and welfare would in no way be adversely affected. In addition, the water system shall:
- (1) Maintain posted notices in place for as long as the violation or occurrence continues, but in no case less than seven days;
  - (2) Repeat the notice every three months as long as the violation or occurrence continues. Subject to the State Board's written approval based on its determination that public health would in no way be adversely affected, the water system may be allowed to notice less frequently but in no case less than once per year. No allowance for reduced frequency of notice shall be given in the case of a total coliform MCL violation or violation of a Chapter 17 treatment technique requirement; and
  - (3) For turbidity violations pursuant to sections 64652.5(c)(2) and 64653(c), (d) and (f), as applicable, a water system shall consult with the State Board as soon as possible within 24 hours after the water system learns of the violation to determine whether a Tier 1 public notice is required. If consultation does not take place within 24 hours, the water system shall give Tier 1 public notice within 48 hours after learning of the violation.
- (c) A water system shall deliver the notice, in a manner designed to reach persons served, within the required time period as follows:
- (1) Unless otherwise directed by the State Board in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, community water systems shall give public notice by:
    - (A) Mail or direct delivery to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system; and
    - (B) Use of one or more of the following methods to reach persons not likely to be reached by a mailing or direct delivery (renters, university students, nursing home patients, prison inmates, etc.):
      - 1. Publication in a local newspaper;
      - 2. Posting in conspicuous public places served by the water system, or on the Internet; or
      - 3. Delivery to community organizations.
  - (2) Unless otherwise directed by the State Board in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, noncommunity water systems shall give the public notice by:
    - (A) Posting in conspicuous locations throughout the area served by the water system; and
    - (B) Using one or more of the following methods to reach persons not likely to be reached by a public posting:
      - 1. Publication in a local newspaper or newsletter distributed to customers;
      - 2. E-mail message to employees or students;
      - 3. Posting on the Internet or intranet; or
      - 4. Direct delivery to each customer.

**Section 64465 (Public Notice Content and Format) states in relevant part:**

(a) Each public notice given pursuant to this article, except Tier 3 public notices for variances and exemptions pursuant to subsection (b), shall contain the following:

- (1) A description of the violation or occurrence, including the contaminant(s) of concern, and (as applicable) the contaminant level(s);
- (2) The date(s) of the violation or occurrence;
- (3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through G;
- (4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in drinking water;
- (5) Whether alternative water supplies should be used;
- (6) What actions consumers should take, including when they should seek medical help, if known;
- (7) What the water system is doing to correct the violation or occurrence;
- (8) When the water system expects to return to compliance or resolve the occurrence;
- (9) The name, business address, and phone number of the water system owner, operator, or designee of the water system as a source of additional information concerning the public notice;
- (10) A statement to encourage the public notice recipient to distribute the public notice to other persons served, using the following standard language: —Please share this information with all the other people who drink this water, especially those who may not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail; and
- (11) For a water system with a monitoring and testing procedure violation, this language shall be included: "We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [compliance period dates], we ['did not monitor or test' or 'did not complete all monitoring or testing'] for [contaminant(s)], and therefore, cannot be sure of the quality of your drinking water during that time." ...

(c) A public water system providing notice pursuant to this article shall comply with the following multilingual-related requirements:

(2) For a Tier 2 or Tier 3 public notice:

- (A) The notice shall contain information in Spanish regarding the importance of the notice, or contain a telephone number or address where Spanish-speaking residents may contact the public water system to obtain a translated copy of the notice or assistance in Spanish; and
- (B) When a non-English speaking group other than Spanish-speaking exceeds 1,000 residents or 10 percent of the residents served by the public water system, the notice shall include:
  1. Information in the appropriate language(s) regarding the importance of the notice; or
  2. A telephone number or address where such residents may contact the public water system to obtain a translated copy of the notice or assistance in the appropriate language; and

(3) For a public water system subject to the Dymally-Alatorre Bilingual Services Act, Chapter 17.5, Division 7, of the Government Code (commencing with section 7290), meeting the requirements of this Article may not ensure compliance with the Dymally-Alatorre Bilingual Services Act.

(d) Each public notice given pursuant to this article shall:

- (1) Be displayed such that it catches people's attention when printed or posted and be formatted in such a way that the message in the public notice can be understood at the eighth-grade level;
- (2) Not contain technical language beyond an eighth-grade level or print smaller than 12 point; and
- (3) Not contain language that minimizes or contradicts the information being given in the public notice.

**Appendix 64465-A. Health Effects Language - Microbiological Contaminants.**

Contaminant	Health Effects Language
Total Coliform	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Fecal coliform/E. coli	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
Turbidity	Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

**Section 64469 (Reporting Requirements) states in relevant part:**

- (d) Within 10 days of giving initial or repeat public notice pursuant to Article 18 of this Chapter, except for notice given under section 64463.7(d), each water system shall submit a certification to the State Board that it has done so, along with a representative copy of each type of public notice given.

**Section 64481 (Content of the Consumer Confidence Report) states in relevant part:**

- (g) For the year covered by the report, the Consumer Confidence Report shall note any violations of paragraphs (1) through (7) and give related information, including any potential adverse health effects, and the steps the system has taken to correct the violation.

- (1) Monitoring and reporting of compliance data.

## APPENDIX 2. NOTIFICATION TEMPLATE

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

Este informe contiene información muy importante sobre su agua potable.  
Por favor hable con alguien que lo pueda traducir.

**Bacteriological Monitoring and Reporting Requirements**

**Not Met for [System Name] During [Compliance Period, Year]**

Our water system recently violated a drinking water monitoring requirement. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we did to correct the situation.

**What happened?**

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During [Compliance Period, Year] we did not meet all monitoring or reporting requirements for bacteria and therefore cannot be sure of the quality of our drinking water during that time.

**What should I do?**

- **You do not need to boil your water or take other corrective actions.**
- The table below lists the contaminant we did not properly test for during the [Compliance Period, Year], how many samples we are required to take and how often, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples will be taken
Coliform Bacteria				

- If you have health issues concerning the consumption of this water, you may wish to consult your doctor.

For more information, please contact [Name of Contact] at [Phone Number] or [Mailing Address].

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.*



## **Secondary Notification Requirements**

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- SCHOOLS: Must notify school employees, students, and parents (if the students are minors).
- RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.
- BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.

This notice is being sent to you by [System Name].

State Water System ID: [System Number]. Date distributed: [Public Notification Date]

### APPENDIX 3. COMPLIANCE CERTIFICATION

**Citation Number:** 02-17-18C-018

**Name of Water System:** Lick Observatory

**System Number:** 4300909

#### Certification

I certify that the users of the water supplied by this water system were notified of the bacteriological monitoring and reporting violation of California Code of Regulations, Title 22, Section 64423 for the compliance period of December 2017 and the required actions listed below were completed.

Required Action	Date Completed
(Citation Directive 2) Public Notification Method(s) Used:	

\_\_\_\_\_  
Signature of Water System Representative

\_\_\_\_\_  
Date

**Attach a copy of the public notice distributed to the water system's customers.**

<b>THIS FORM MUST BE COMPLETED AND RETURNED TO THE STATE BOARD, DIVISION OF DRINKING WATER, NO LATER THAN May 25, 2018</b>
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**Disclosure:** Be advised that the California Health and Safety Code, Sections 116725 and 116730 state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the Safe Drinking Water Act may be liable for, respectively, a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violation or, for continuing violations, for each day that violation continues, or be punished by a fine of not more than \$25,000 for each day of violation, or by imprisonment in the county jail not to exceed one year, or by both the fine and imprisonment.